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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,062	12/01/2003	Takuya Hamada	HAMA3008/EM	1728
23364	7590	05/11/2006	EXAMINER	
BACON & THOMAS, PLLC			THOMPSON, CAMIE S	
625 SLATERS LANE				
FOURTH FLOOR			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			1774	

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/724,062	HAMADA ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Camie S. Thompson	1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on Amendment filed 2/28/06.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 10-17 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

**DETAILED ACTION**

1. Applicant's amendment and accompanying remarks filed February 28, 2006 have been acknowledged.
2. Examiner acknowledges amended claims 10-14.
3. Examiner acknowledges cancelled claims 1-9.
4. Examiner acknowledges newly added claims 15-17.
5. The rejection of claim 1 under 35 U.S.C. 102(b) as being anticipated by JP 02-120389 is withdrawn due to applicant's cancelled claim 1.
6. The rejection of claim 1 under 35 U.S.C. 102(e) as being anticipated by Mueller et al., U.S. Patent Number 6,686,691 is withdrawn due to applicant's cancelled claim 1.
7. The rejection of claims 1-2 and 5-7 under 35 U.S.C. 102(a) as being unpatentable over deSouza, U.S. Patent Number 4,684,353 is withdrawn due to applicant's cancelled claims 1-9.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 10, 13-14 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Komatsu et al., U.S. Pre-Grant Publication 2003/0071560.

Komatsu discloses a field emission display that has a structure with a plane-shaped field emission type electron source mounted on a rear plane of enclosed a vacuum box and phosphor layers (see paragraph 0003). Paragraph 0009 of the reference discloses that the phosphor layer comprises a mixture of main phosphors and small particle phosphors. Paragraphs 0014 and 0015 disclose that the main phosphors can be SrTiO<sub>3</sub>:Pr (red phosphor) and small particle phosphor ZnGa<sub>2</sub>O<sub>4</sub>:Mn or ZnS:Cu. It is disclosed in paragraph 0018 that the phosphor layer is formed by mixing the small particle phosphors into the main phosphors in a range larger than or equal to 10 weight% and also smaller than, or equal to 40 weight %.

10. Claims 11-12 and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not provide for the recited fluorescent display device, further including the phosphor of the green family luminous color is ZnS:Cu, Al or ZnS:Au,Al and the mixing ratio is about 5 to 50 weight percent.

***Response to Arguments***

11. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena L Dye, can be reached at (571) 272-3186. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RENA DYE  
SUPERVISORY PATENT EXAMINER

A.U. 1774 S10/04